Notebook Series -- Notebooks by Edison and Other Experimenters
Disc Record Book No. 25
Notebook, N-17-08-06.2

This notebook was used by William W. Dinwiddie, Archie D. Hoffman, and possibly other experimenters during August 1917-March 1918 for notes on efforts to improve the surface quality of Edison disc records. There are occasional comments by Edison on the work performed. The entries pertain primarily to a sequence of experiments numbered from 1801E to 1896E. Most involve experimental lots of record blanks constructed by different methods or prepared with different ingredients, including wood flour purchased from various suppliers. Some of the experiments involve different varnish compounds and variations in the methods of applying it. One note details the "actual process of making varnish." A few entries refer to "Inspection" books A and B (N-17-08-13 and N-17-08-31 [not selected] in Notebooks by Other Experimenters—Phonograph Record Experiments—Record Inspection Books). There are also references to "Rice's book" (G. B. Rice Non-experimental Notebook, N-17-09-25 [not selected]) and to suggestions by Charles G. Kircher and an experimenter named Gray. The notes often take the form of instructions describing the experimental records wanted, accompanied by evaluations of the test records produced. The front and back covers are labeled "25." The pages are unnumbered. Approximately 160 pages have been used.

1801-E

OK OK	X	OK OK	X	Drop test		Caliper	Points
OK OK	X	OK OK	X	1.	14		.227
OK OK	X	OK OK	X	2.	7		.226
OK OK	X	OK OK	X	3.	5		.227.5
OK OK	X	OK OK	X	4.	13		.221
OK OK	X	Low Spot		5.	1		.214.5
OK OK	X	OK OK	X	6.	3		.218.5
OK OK	X	OK OK	X		43 Times		
OK OK	X	OK OK	X				
OK OK	X	Low Spot					
OK OK	X	OK OK	X				
OK OK	X	Low Spot					
		OK OK					
100%		75%					

1801-E Make one drier full regular 1738-E except use all Dupont Wood flour Keep 5 lb sample of wood flour for tests later,

Records 407

discards
- 2 pull outs
- 1 crushed edge
- 4 parallel dr -
- 2 wood in blank
- eye 5 metal " "
- 1 stain
- 3 low spots
- 2 rough spots

machine and final
- 15 rough spots
- 5 snaps
- 16 stains

66 total discards

407) 0/2, 341, 3256, 1540, 1221, 3190 (83.7 % OK

(3)

1802-E

OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
Core Spot		OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
91 2/3 %		100 %	

Drop test Caliper Points

1.	16	.197.5
2.	4	.190
3.	20	.203.5
4.	6	.221
5.	20	.200.5
6.	8	.207
	74 times	

1802-E make one drier full of regular 1738-E product except all Cannaqua wood flow

Keep 5 lb sample of wood flow for tests later.

1803-E

OK OK	x	OK OK	x	Drop test	Caliper Points		
OK OK	x	OK OK	x	1.	20	.228.5	
OK OK	x	OK OK	x	2.	20	.198	
OK OK	x	OK OK	x	3.	14	.201.5	
OK OK	x	OK OK	x	4.	20	.203.5	
OK OK	x	OK OK	x	5.	20	.219.5	
OK OK	x	OK OK	x	6.	9	.199	
OK OK	x	OK OK	x		103 Times		
OK OK	x	OK OK	x				
OK OK	x	OK OK	x				
OK OK	x	OK OK	x				
OK OK	x	OK OK	x				
OK OK	x	OK OK	x				
OK OK	x	OK OK	x				
OK OK	x	OK OK	x				
100.%		100%	x				

1803-E Make one drier full of regular 1738-E powder except use all Norway wood flour. Keep 5 lbs sample of wood flour for tests later.

600 lbs Pressure 8/6/17

1804-E

OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK

83%

53%

5 lbs antigelite accuracy for one arm

8/6/17

1804-E 500 lbs pressure

OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK
OK OK

Cov Spot.

83%

50%

6 lbs antigelite accuracy for one arm

1804-E (Duplicate of 1355-E)

Use regular 1338 Powder proportions;

Put wood, chalk and lampblack in mixer and mix dry for 30 min.
Grind in Fuller Mill — do not screen —
Mix with gum 30 min.
dry on 2 hour schedule
Grind and screen regular —
Mould, varnish and print regular
except 4 rounds on 1781 schedule

2 rounds to be printed on 600 lbs
2 rounds " " " " 500 lbs

Drop test

1 — 13
2 — 20
3 — 20
4 — 7
5 — 18
6 — 20

9 strines

8/8/17

1805-E Bowl Edge

				Drop test	Caliper Points
OK OK	x	OK OK	x	1. 14	.227.1
OK OK	x	OK OK	x	2. 10	223.1
OK OK Saw Spot		OK OK	x	3. 10	.224
OK OK	x	OK OK	x	4. 3	.217
OK OK	x	OK OK Saw Spot		5. 20	.220
OK OK	x			6. 7	.225
OK OK	x	OK OK	x	64 times	
Saw Spot		OK OK	x	1054 Unit # 6	
OK OK	x	OK OK	x	425 Records inspected	
OK OK	x	OK OK	x	363 Records O.K. final	
OK OK	x	OK OK	x	85.6%	
OK OK	x	OK OK	x	1 Jumbo Pull Outs	
OK OK	x	OK OK	x	2 Crushed Edges	
OK OK	x	OK OK	x	19 Parallel Bar	
OK OK	x	OK OK	x	1 Broken	
OK OK	x	OK OK	x	1 Scratch	
				35 Rough Spot	
				2 Smear	
				1 Sliver	
91%		100%		73 Discards	
85%		91%			

See Exponent 1822

1805-E

Make 500 blanks regular except keep pressure on hydraulic packing pump up to full pressure for 5 seconds on every blank.

Varnish and print regular.

Send 24 to Mills.

1805-E — 1334-E

				Drop test
OK OK	x	OK OK	x	1 — 5
OK OK	x	OK OK	x	2 — 2
OK OK	x	OK OK	x	3 — 20
OK OK	x	OK OK	x	4 — 4
OK OK	x	OK OK	x	5 — 6
OK OK	x	OK OK	x	6 — 7
OK OK	x	OK OK	x	43 times
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	Inspected 434 Records
OK OK	x	OK OK	x	OK 372 Records
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	90.3%
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
100%		100%		

1806-E

OK OK	x	OK OK	x	Drop Test	Caliper	Points
OK OK	x	OK OK	x	1.	18	.227
OK OK	x	OK OK	x	2.	20	.225
OK OK	x	OK OK	x	3.	20	.218
OK OK	x	OK OK	x	4.	16	.226
OK OK	x	OK OK	x	5.	20	.222
OK OK	x	OK OK	x	6.	20	.229.5
OK OK	x	OK OK	x		11 4 times	
OK OK	x	OK OK	x			
OK OK	x	OK OK	x			
OK OK	x	OK OK	x			
OK OK	x	OK OK	x			
		OK OK	x			
		OK OK	x			
		OK OK	x			
100.%		100.%				

See 1818 and 1781

1806-E Make two rounds regular 1738-1781 Blanks except in large press use only 400 lbs pressure. Varnish and print regular send to Miller —

1807-E

OK OK	X	OK OK	X	Drop test	Caliper Points
OK OK	X	OK OK	X	1. —— 6	.231.5
OK OK	X			2. —— 19	.208.5
		OK OK	X	3. —— 20	.218.5
OK OK	X	OK OK	X	4. —— 16	.226.5
OK OK	X	OK OK	X	5. —— 20	.220
Moisture 4/20				6. —— 20	.238.5
		OK OK	X		
OK OK	X	OK OK	X		
OK OK	X	OK OK	X		
OK OK	X	OK OK	X		
OK OK	X	OK OK	X		
OK OK	X	OK OK	X		
OK OK	X				
83 1/3 %		90. %			

1807-E Make two rounds regular
Blanks 1738-1781 - to check
1806 and 1808 —
Varnish and print regular -
Send to Miller -

1808-E

OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	Stain	
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
100. %		91 2/3 %	

Drop test Caliper Points:

1.	20	.207
2.	4	.219.5
3.	20	.220
4	20	.225
5.	20	.218.5
6.	20	.205

10 4 times

1808-E

Make two rounds req blanks 1738-1781 except 500 lbs pressure on large press

varnish and print regular send to Mills.

Aug 10/17

1809-E

Low Spot				Drop test	Caliper Points
		OK OK	x	1. 8	.209
OK OK	x	OK OK	x	2 20	.224.5
OK OK	x	OK OK	x	3. 5	.217.5
OK OK	x			4. 15	.206
OK OK	x	OK OK	x	5. 13	.205.5
OK OK	x	OK OK	x	6. 20	.217.5
OK OK	x	OK OK	x	81 times	
OK OK	x	OK OK	x		
OK OK	x	OK OK	x		
OK OK	x	OK OK	x		
OK OK	x	OK OK	x		
OK OK	x	OK OK	x		
OK OK	x	OK OK	x		
91 2/3 %		91 2/3 %			

1809-E Make one drum full regular 1738-E powder except use all Union wood flour — Keep 5 lbs sample of wood — Send 24 to Miller.

8/10/17

1810-E

OK	OK	x	Drop test	Caliber Points
OK	OK	x	1 — 20	224.
OK	OK	x	2 — 20	.230.1
OK	OK	x	3 — 3.	.219.3
OK	OK	x	4 — 17	.227
OK	OK	x	5 — 20	.220
OK	OK	x	6 — 20	.229
OK	OK	x	10 0 times	
OK	OK	x		
OK	OK	x		
OK	OK	x	1810-1519 Long Bowl 8/11/17	
OK	OK	x	403 Records inspected	
OK	OK	x	315 Records OK final	
OK	OK	x	78.9% OK	
OK	OK	x		
OK	OK	x	2 Varnish	
OK	OK	x	2 Crushed Edges	
OK	OK	x	29 Stains	
OK	OK	x	5 Fracture	
OK	OK	x	44 Bright spots	
OK	OK	x	1 Silver	
OK	OK	x	82 Total Discards	

91% 91%

Corrected per Chas. Dixon

1810-E make regular powder
1738-E from ½ Dupont and
½ Garniques wood flour —
~~Start~~. P.M. Aug 8th

~~Ok~~ long bowl blank not sharp —
600 lbs on blank press
600 on print —

8/13/17

Inspection Report on 1810 E-1738-E Unit 6
500 lbs. Blk Pressure. 600 lbs on Printing Pressure Long Bowl
1009 Records inspected
895 OK final
Total % 88.7% OK.

7 Varnish Pulls Ends
4 Crushed Edges
6 Parallel cracks.
1 scratch
8 stains
13 low spots
32

C215

8/10/7

1811E

OK OK	x	OK OK	x	Drop test Caliper Points	
OK OK	x	Few spots		1. ——— 9	.242
OK OK	x	OK OK	x	2. ——— 4	.234
OK OK	x	OK OK	x	3. ——— 20	.212
OK OK	x	OK OK	x	4. ——— 10	.209
OK OK	x	OK OK	x	5. ——— 20	.239.5
OK OK	x	OK OK	x	6. ——— 20	.229
OK OK	x				
OK OK	x				
OK OK	x				
OK OK	x				
Few spots		5 Cracked			
Few spots		blanks			
83⅓ %		83⅓ %			

1811-E

Make one drier full regular 1738-E powder ⅓ each Dupont, Garrigues and Union woodflour.

5/8/11

Inspt Name

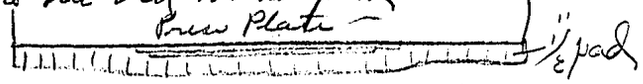
1812 - E

OK	OK	Drop test	Calipers Point
OK	OK	1. — 3	237.1
OK	OK	2. — 4	.222
OK	OK	3. — 5	.224.1
OK	OK	4. — 5	.234
OK	OK	5. — 7	.220
OK	OK	6. — 2	.227
OK	OK	26 times	
OK	OK		
OK	OK		
OK	OK		
OK	OK		
OK	OK		
OK	OK		
OK	OK		
OK	OK		
OK	OK		

100% on printing

3 Bbls one after coming from Extra.

1812-E make 500 blanks with cardboard under center of rubber pad to make it press powder down firmer in packing press like the old solid pad —



make regular 1738 all them send 24 to Miller —

478 Records inspected
385 OK.
total % 80.5% OK.

478 Records inspected
7 Veneer Pull Outs?
1 Pull Out on Label
8 Parallel Cracks.
2 stains
2 Narrow margins
2 low Spot
5 Snaps
46 Rough Spots
1 crushed Edge
75 Total discards
12 Rough Spot
4 Snaps
1 Silver
1 Stain
93 Total Discards

C25

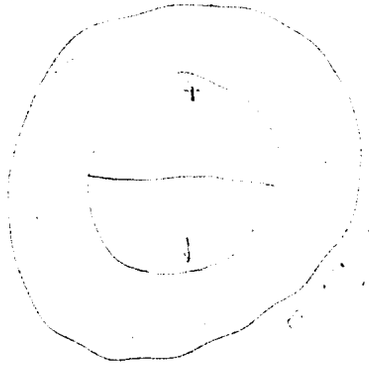
Semi sharp Edge — 8/8/17

1813-E

				Drops test	Caliper Point
OK	x	OK	x	1. — 11	225
OK	x	OK	x	2. — 20	231
OK	x	OK	x	3. — 14	[illegible]
OK	x	OK	x	4. — 20	222
OK	x	OK	x	5. — 7	218.1
OK	x	OK	x	6. — 20	230.1
OK	x	OK	x	93 turns	
OK	x	OK	x		
OK	x	OK	x		
OK	x	OK	x		
OK	x	OK	x		
OK	x	OK	x		
OK	x	OK	x		
OK	x				
100%		100%			

1813-E

Make 500 blanks with a 6-inch circle of felt laid on center of the thin rubber pad — Make disc regular 1738 all them — send 24 to Milton.



435 Records inspected
241 Records OK final

55.4 % OK,

2 Serious Pull Outs
2 Crushed Edges
17 Varied Otis.
2 Scratches
6 Metal in blank.
10 Stains
79 Dirty Spots
20 Snaps
65 Rough Spots
2 Radial Cracks
9 Stains

5/5/17

5/4	Day Work	Day Work	Day Work	Day Work
OK OK			OK OK	OK OK
		OK OK	Low Spot	OK OK
OK OK	OK OK	OK OK	OK OK	Low Spot
OK OK	OK OK	OK OK Low Spot	OK OK	OK OK
			OK OK	OK OK
OK OK		Low Spot		
OK OK	OK OK	Low Spot	Low Spot	OK OK Low Spot
OK OK	OK OK Low Spot	OK OK	OK OK	
			OK OK	Low Spot
OK OK	OK OK	Stain		OK OK
OK OK	Low Spot	OK OK	OK OK	
			Low Spot	
OK OK	Low Spot	OK OK		
OK OK			OK OK	
OK OK	Low Spot	OK OK	OK OK	
	OK OK	OK OK		
OK OK				
91%	50%	66%	75%	50
	41%	58%		
Night Work				

1814-E 8-8-17 - P. R. Gray -

Blanks edged to (1st cut size) before printing - After printing only polished off with emery cloth -

Eng. Cover 8/10/17.

1815-E

OK OK	OK OK	OK	OK OK
OK OK	OK OK		OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
100%	100%	91%	100%
		83%	

1815-E make 4 rounds holding pressure on packing press for 5 seconds - like 1805 - then keep pressure down to 400 lbs on the large press like 1806-E
Varnish and print regular -

Long Bevel 8/15/17

1816-E

OK OK	OK OK	OK OK	OK OK
OK OK	OK OK		
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	
OK OK	OK OK	OK OK	
OK OK	OK OK	OK OK	
OK OK	OK OK	OK OK	
OK OK	OK OK	OK OK	
OK OK	OK OK	OK OK	
Low Spot	OK OK	OK OK	
OK OK	OK OK	OK OK	
OK OK	OK OK	OK OK	
OK OK	OK OK	OK OK	
91%	100%	91%	

1816-E

Make 4 rounds regular blanks except hold steam pressure on large press down to 50 pounds, otherwise regular schedule.

Varnish and print regular send all to mills.

5/10/17

1817

OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x		
OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x		
OK OK	x	5 Ends blue after coming from Oven	
OK OK	x		
OK OK	x		
New Spot			
91%		50%	

1817-E

Repeat 1812 – Make 1000 blankets and 24 to Miller –

6" cardboard discs ~~[illegible]~~ between the 1/2 inch rubber and the press plate –

408 Rounds misspots
390 Rounds OK. Sent
71.3% OK.

4 Various Pull [illegible]
16 Parallel [illegible]
1 Narrow [illegible]
6 Snaps
89 Round Spots
1 Stain
1 Three Spot
115 Total Rejects

(35)

Leng ... 8/9/17

181...

OK OK ×	OK OK ×	OK OK ×	OK OK
OK OK ×	OK OK ×	OK OK ×	OK OK
OK OK ×	OK OK ×	OK OK ×	OK OK
OK OK ×	OK OK ×	OK OK ×	OK OK
OK OK ×	OK OK ×	OK OK ×	OK OK
OK OK ×	OK OK ×	OK OK ×	OK OK
OK OK ×	OK OK ×	OK OK ×	OK OK
OK OK ×	OK OK ×	OK OK ×	OK OK
OK OK ×	OK OK ×	OK OK ×	Discard
OK OK ×	OK OK ×	OK OK ×	OK OK ×
OK OK ×	OK OK ×	OK OK ×	OK OK ×
OK OK ×	OK OK	OK OK ×	OK OK ×
100%	100%	100%	91%

-1818-E - also see 1841 -

Make 4 rounds regular blanks except keep pressure on large press down to 400 pounds. same as 1806-E -

Varnish and print regular

Send all to Miller —

1818-E Duplicate 8/13

OK OK ×	OK OK ×	OK OK ×	OK OK ×
OK OK ×	OK OK ×	OK OK ×	OK OK ×
OK OK ×	OK OK ×	OK OK ×	OK OK ×
OK OK ×	OK OK ×	OK OK ×	OK OK ×
OK OK ×	OK OK ×	OK OK ×	OK OK ×
OK OK ×	OK OK ×	OK OK ×	OK OK ×
OK OK ×	OK OK ×	OK OK ×	
OK OK ×	OK OK ×	OK OK ×	5 discard blanks - 2 chipt 3 cracked center.
OK OK ×	OK OK ×	OK OK ×	
OK OK ×	OK OK ×	OK OK ×	
OK OK ×	OK OK ×	OK OK ×	
OK OK ×			
100%	100%	100%	

8/10/17

OK	OK	OK	OK
OK	Overshot	Overshot	OK
OK	OK	OK	OK
OK	OK Overshot	OK	OK
OK	OK	OK	OK
OK	OK	OK	OK
OK	OK		OK
OK	OK	OK	OK
OK	OK	OK	OK
OK	OK	OK	
OK	OK	OK	OK
OK	OK	OK	OK
			OK
OK			
91%	91% 83%	83%	91%

Total 89%

1819-E

Change pressure on large blower pressure from 600 lbs to 500 pounds also all regular work - 11-AM August 10-1917

Unit # 6 1334 Pounds 5 [illegible]
470 Rejects inspected
390 On final
82.9%

5 Dove spots [illegible]
1 Overshot [illegible]
4 Chevalle [illegible]
13 Stains
8 Lugs
48 Rejects [illegible]
31 Not Auto [illegible]
70 Total Rejects

See Inspection Book A

			Page				Page
907	Records	73.4 %	25.	528	Records	65.3 %	50.
2261	"	59.2 "	30.	1459	"	77.4 "	51.
1141	"	54.9 "	33.	2378	"	71. "	52.
251	"	48.2 "	34.	2588	"	75. "	53.
885	"	56. "	35.	3130	"	75.3 "	54.
1582	"	54.4 "	36.	783	"	63.2 "	55.
2848	"	74.5 "	37.	3387	"	77. "	56.
3209	"	67.6 "	38.	1067	"	75.8 "	63.
45	"	62.2 "	39.	1619	"	50.9 "	65.
3437	"	57.2 "	43.	591	"	78.3 "	69.
1137	"	64.2 "	46.	596	"	71.6 "	71.
2540	"	52. "	47	1854	"	71.4 "	72.
4735	"	51.4 "	49				

8/10

1820-E

OK OK	x
OK OK	x
OK OK	x
OK OK	x
Clear Spot	
OK OK	x
OK OK	x
OK OK	y
OK OK	x
OK OK	y
OK OK	x
OK OK	x

91%

OK OK	x
OK OK	x
OK OK	x
OK OK	x
OK OK	x
OK OK	x
OK OK	y
OK OK	x
OK OK	y
OK OK	x

91%

8/15/17

1820 Dublicate

OK OK	x
OK OK	x
OK OK	x
OK OK	x
OK OK	x
OK OK	x
OK OK	x
OK OK	x
OK OK	x
OK OK	x
OK OK	x
OK OK	x
OK OK	x
OK OK	x
OK OK	x
OK OK	x
OK OK	x
OK OK	x
OK OK	x
OK OK	x
OK OK	x

91%

3 Heads are alike Ormany Hour Glass

1820-E Special Coat Varnish

Varnish 2 gallons linseed oil to 3 coats of Japanese 15 minutes between each coat

Bake 9 minutes and run to Mills

C413

8/13/17

1821-E

OK OK	Low Spot	Low Spot	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
Mark Dbl	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	Low Spot
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	Low Spot	Low Spot
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	Low Spot	OK OK
OK OK	OK OK	OK OK	Low Spot
Low Spot	OK OK	Low Spot	Low Spot
OK OK	OK OK		
83%	91%	66%	66%

1821-E Repeat 1818-E

1821-E Duplicate 8/14/17

OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	Shifted 1/2
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK			
100%	100%	100%	91%
		91%	

see 3 pages back 1818

other 1826-E found on 151

1822-E Same as 1505

Unit # 4 - 104A Long Reach

420 Records inspected

275 records OK final (65.4%)

6 Broad Jump Cuts
44 Parallel Cuts
1 Radial
1 Minor Fracture
9 Low Spot
9 Crack
70 Rough Spots
1 Stain
145 total Discrepancies

432 Records inspected

277 records OK final (64.1%)

103A Unit # 2

3 Broad Jump Cuts
52 Parallel Cuts
2 Radial
38 Low Spots
2 Crack
26 Rough Spot
1 Inclusion
1 Stain
1 Offset
155 total Discrepancies

106A Long Reach

267 Records inspected

97 Records OK final

(73.7%)

8 [illegible] 7

4 [illegible]
2 Parallel Cuts
16 Radial Cuts
1 Stain
18 Low Spots
20 Rough Spots
2 Crack
70 total Discrepancies

B-1 8/13/17		B-2 8/17	
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
	OK OK	OK OK	OK OK
Low Shot	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK		Low Shot
OK OK	OK OK	OK OK	OK OK
OK OK			
91%	100%	100%	91%

1823-E

Mark enough blanks for 4 rounds with pencil B on bottom side - Varnish 2 rounds first on the Bottom - mark them B-1 - Varnish 2 rounds first on the top mark them B-2

Print regular - send all to Miller —

1824-E

See Inspection Book A.

			Page
1500	Records	81.2 %	62.
1161	"	79.5 "	67.
1372	"	81.1 "	68.
997	"	82. "	70.
6633	"	82.5 "	73.
5939	"	83.9 "	74.
1173	"	65.7 "	81.
811	"	87.8 "	82.
3066	"	83.8 "	83.
1273	"	86.6 "	84.
3678	"	85. "	85.
673	"	81.8 "	86.
2142	"	75.8 "	87.
579	"	85.1 "	88.
3273	"	78.5 "	93.
3536	"	78. "	94.
3268	"	82. "	98.
2609	"	82. "	99.
491	"	76.5 "	102.
284	"	76. "	103.
1262	"	84.6 "	107.
144	"	74.3 "	108.
665	"	81.2 "	113.
478	"	76.9 "	114.
1316	"	78.5 "	115

forwd

1824-E Regular blanks August 16-17

Same as 1666-E for proportions of wood-chalkete,
" " 1738-E method of mixing,
" " 1508-E method of drying,
" " 1654-E method of grinding and Screening,
" " 1605-E packing press rubber pads.
" " 1675½-E packing press pressure 640 lbs,
" " 1781-E } Blanks press schedule
" " 1819-E }
" " 1810-E wood flour used —
" " 1747-E Bending blanks

See Inspection Book A.

			Page
157	Records	87.3 %	131.
335	"	79.1 "	132.
214	"	89.2 "	135.
3736	"	81.5 "	136.
3318	"	83.5 "	138.
2349	"	78.9 "	143.
1830	"	77.9 "	144.
1704	"	84.6 "	146.

8/21/17

1825-E-1805-E		1825-E-1819-E	
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK		OK OK	
100.%	100.%	100.%	100.%
	1 Discards blank 1 chipped		1 Discards blank 1 chipped

1825-E

Same as 1824-E except use

60 lbs wood
40 lbs chalk
14 lbs Rosin
50 lbs alcohol
2 lbs gas black -

Make one drum of above gum - Make up the powder and then we will know whether to use 1806 or 1819 for moulding.

1825-E-1827-E		8/21/17
OK OK	OK OK	See Inspection Book A
OK OK	OK OK	1825-E-1819 Page
OK OK	OK OK	219 Records 80.3% 58.
OK OK	OK OK	1825-E-1821-E
OK OK	OK OK	145 Records 88.2% 60.
OK Low-Spot	OK OK	1825-E-1805-E
OK	OK OK	317 Records 89.9% 59.
OK OK	OK OK	588 " 81.9% 61
OK OK	OK OK	1825-E
OK OK	OK OK	348 Records 81.% 77
OK OK	OK OK	798 " 79.3% 116
OK OK	OK OK	
OK OK		
91 2/3 %	100.%	

1 Silk crushed after coming out of oven

8/17/17

1821-E

OK OK x	OK OK x	OK OK x	OK OK x
OK OK x	OK OK x	Cover Bad	OK OK x
OK OK x	OK OK x	OK OK x	OK OK x
OK OK x	OK OK x	OK OK Cover Bad	OK OK x
OK OK x	OK OK x	OK OK x	OK OK x
OK OK x	OK OK x	OK OK x	OK OK x
OK OK x	OK OK x	OK OK x	OK OK x
OK OK x	OK OK x	OK OK x	OK OK x
OK OK x	OK OK x	OK OK x	OK OK x
OK OK x	OK OK x	OK OK x	
OK OK x	OK OK x	OK OK x	
OK OK	OK OK x	OK OK x	
100%	100%	91% 83%	3 Blks cracked after annealing [illegible]

8/18/17

1821-E

OK OK x	OK OK x	OK OK x	OK OK x
OK OK x	OK OK x	OK OK x	OK OK x
OK OK x	OK OK x	OK OK x	OK OK x
OK OK x	OK OK x	OK OK x	OK OK x
OK OK x	OK OK x	OK OK x	OK OK x
OK OK x	OK OK x	OK OK x	OK OK x
OK OK x	OK OK x	OK OK x	OK OK x
OK OK x	OK OK x	OK OK x	OK OK x
OK OK x	OK OK x	OK OK x	OK OK x
OK OK x	OK OK x	OK OK x	OK OK x
OK OK x	OK OK x	OK OK x	OK OK x
OK OK x	OK OK x	OK OK x	
OK OK x	OK OK x	OK OK x	
100.%	100.%	100.%	100.% 4 Blks cracked after coming out of [illegible]

8/20/17

1821-E

OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	
OK OK	OK OK	OK OK	
OK OK	OK OK	OK OK	
OK OK	OK OK	OK OK	
OK OK	OK OK	OK OK	
OK OK	OK OK	OK OK	
100.%	100.%	100.%	100.%

8/20/17

1821-E

OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
91 2/3 %	100. %	91 2/3 %	100. %

C55]

8/22/17

1826-E-1827-E

OK OK	×	OK OK	×	Drop test Caliper Point
OK OK	×	OK OK	×	1. — 4 .195.5
OK OK	×	OK OK	×	2. — 2 .211.5
OK OK	×	OK OK	×	3. — 20 .201.5
OK OK	×	OK OK	×	4. — 20 .206.5
OK OK	×	OK OK	×	5. — 20 .207
OK OK	×	OK OK	×	6. — 2 .192
OK OK	×	OK OK	×	68 times
OK OK	×	Rough Spot		See Inspection Book A Page
OK OK	×	OK OK	×	365 Records 72.8%109.
OK OK	×	OK OK	×	
OK OK	×	OK OK	×	
OK OK	×	OK OK	×	
OK OK	×	OK OK	×	
OK OK	×	OK OK	×	
100.%		91 2/3 %		

1826-E

Same as 1824-E except use —
60 lbs wood
40 lbs chalk
→ 13 lbs Rosin
50 lbs Alcohol
2 lbs Gas black —
Make one drum above Gum
make up 200 blanks on 1806
blank schedule and balance
on 1819 Schedule — Send 24 of
each to Building XX 41.

1826-E-1806-E 8/23/17

OK OK	×	OK OK	×	See Inspection Book A Page
OK OK	×	OK OK	×	
OK OK	×	Moisture Spot		539 Records 84.% 91.
OK OK	×	OK OK	×	
OK OK	×	OK OK	×	
OK OK	×	OK OK	×	
OK OK	×	OK OK	×	
OK OK	×	OK OK	×	
OK OK	×	OK OK	×	
OK OK	×	OK OK	×	
OK OK	×	OK OK	×	
OK OK	×	OK OK	×	
OK OK	×	1 Shineard		
OK OK	×	Blk cracked		
OK OK	×	after Coming		
OK OK	100.%	out of Oven	91 2/3 %	

8/21/17

1827-E

See Inspection Book A

OK OK	×	OK OK	×	4931	Records		79.9	%	Page 141
OK OK	×	OK OK	×	5150	"		76.1	%	142
OK OK	×	OK OK	×	1015	"		80.3	%	145
OK OK	×	OK OK	×	2780	"		79.9	%	147
OK OK	×	OK OK	×	8852	"		77.9	%	148
OK OK	×	OK OK	×	5556	"		77.6	%	149
OK OK	×	OK OK	×	2834	"		75.6	%	151
OK OK	×	OK OK	×	341	"		65.6	%	152
OK OK	×	OK OK	×	1285	"		69.2	%	153
OK OK	×	OK OK	×	750	"		59.7	%	154
OK OK	×	OK OK	×	1161	"		63.4	%	155
OK OK	×	Low Spot		1889	"		74.8	%	165
OK OK	×	OK OK	×	187	"		74.8	%	172
OK OK	×	OK OK	×	769	"		69.8	%	173
OK OK	×	OK OK	×	4983	"		71.	%	174
OK OK	×	OK OK	×	1062	"		66.6	%	175
OK OK	×			1572	"		76.7	%	176
100. %		91⅔ %							

Pressure on Blanks

1827-E

Same as 1824 except change pressure on blank press from 500 lbs to 450 lbs.

Pressure Changed to 450 lbs
9.30 Am 8/21/17

See Inspection Book A

301	Records		90.%	Page 75
407	"		91.8%	76
3780	"		82.6%	100
3012	"		80.2%	101
1840	"		77.2%	104
1840	"		76.5%	105
1646	"		82.8%	111
3336	"		85.1%	118
2408	"		81.9%	121
324	"		86.4%	122
3165	"		83.4%	125
3718	"		84.8%	127
1949	"		79.5%	128
1701	"		84.8%	129
364	"		88.1%	133
1902	"		88.2%	137
1571	"		84.2%	139
1272	"		73.2%	140
116			76.7	Book B. 21

1828-E - 1827-E

OK OK	x	OK OK	x	Drop test	Calipers	Points
BK OK	x	OK OK	x	1. —	2	.211
Hole in Blk		OK OK	x	2. —	5	.198.6
OK OK	x	OK OK	x	3. —	9	.199
OK OK	x	OK OK	x	4. —	8	.199
OK OK	x	OK OK	x	5. —	3	.206
OK OK	x	OK OK	x	6. —	20	.201.5
OK OK	x	OK OK	x		4.7 times	
Moisture spot		OK OK	x			
OK OK	x	OK OK	x			
OK OK	x	OK OK	x			
OK OK	x					
OK OK	x	2 Discard Blanks				
		1 Chipped				
83 1/3 %		1 Moisture spot				
		100.%				

1828-E Same as 1824 Except as follows:

1. Wood flour like 1811 — 1/3 Hornbeck (Garrigues), 1/3 Dupont, 1/3 Union.
   One bale of each is opened up and shoveled into the sifter - a shovel from each bale, then three more bales are opened up etc. Proportions are not exact as by weighing.
2. 450 lbs pressure on blanks press like 1827.
3. 13 lbs Rosin like 1826.

1828-E

OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
OK OK	x	OK OK	x	
OK OK	x			
100.%		100.%		

Discards
3 Blanks Chipped

CGJ

8/28/17

1828-E

OK OK ×
OK OK ×
OK OK ×
Low Spec.
OK OK ×
OK OK ×
OK OK ×
OK OK ×
OK OK ×
OK OK ×

91 2/3 %

OK OK ×
OK OK ×
OK OK ×
OK OK ×
OK OK ×
OK OK ×
OK OK ×
OK OK ×
OK OK ×
OK OK ×
OK OK ×

100. %

Drop test	Caliper	Point
1.	1	.231
2.	8	.214.5
3.	2	.229.5
4.	12	.218.5
5.	3	.211
6.	5	.228
	31 times	

See Inspection Book. A

		Page
167	Records	67.% - 150
1064	"	77.1% - 156
833	"	78.5% - 157
162	"	91.3 % - 158
425	"	72.3 % - 159
180	"	88.8 % - 160
1012	"	76. % - 162
180	"	82.7% - 161
523	"	77.4 % - 162
4002	"	71.9 % - 164
661	"	76. % - 166
760	"	86.5% - 167
407	"	85.5 % - 170
350	"	85.1 % - 171

1828-E Page

See Inspection Book → A + B Page

			Page				Page
1652	Records	88.6%	179.	867		$76.^{2}$ "	25
2946	"	80.3 "	180.	1667	"	$78.^{3}$ "	26
4371	"	85. "	181.	2269	"	85.9 "	28
3072	"	82.7 "	189	171	"	87.1 "	27
2911	"	$77.^{2}$ "	190	2247	"	$71.^{5}$ "	32
83	"	89.1 "	191	2726	"	91.3 "	33
114	"	95.6 "	192	1670	"	$76.^{2}$ "	34
3994	"	76^{2} "	193	2361	"	82. "	35
1735	"	$81.^{2}$ "	194	59	"	84.7 "	36
1870	"	81.3 "	195	365	"	85.7 "	37
↓ See Book B. ↙				932	"	$85.^{2}$ "	38
2347	Records	$76.^{6}$ "	1.	2611	"	$83.^{7}$ "	39
1441	"	80.3 "	3.	3212	"	$85.^{4}$ "	40
1624	"	70.9 "	6.	3102	"	$85.^{6}$ "	41
1333	"	78.6 "	7	1658	"	$82.^{2}$ "	46
2116	"	$81.^{5}$ "	9	396	"	$81.^{5}$ "	47
1202.	"	$76.^{8}$ "	12.	4212	"	77.9 "	49
3337	"	$80.^{2}$ "	13	3333	"	77. "	51
1820	"	$78.^{8}$ "	15.	145	"	$66.^{2}$ "	52
298	"	$87.^{9}$ "	16	4,571.	"	83.7 "	53
2199	"	$78.^{2}$ "	17.	2408.	"	$77.^{6}$ "	54
2480	"	81. "	18	1157	"	$85.^{7}$ "	56
248	"	89.9 "	19	2993	"	$80.^{6}$ "	57
680	"	$75.^{8}$ "	20				
3540	"	$76.^{4}$ "	23				

8/31/17

1829-E

OK OK	×	OK OK	×
OK OK	×	OK OK	×
OK OK	×	OK OK	×
OK OK	×	OK OK	×
OK OK	×	OK OK	×
OK OK	×	OK OK	×
OK OK	×	OK OK	×
OK OK	×	OK OK	×
OK OK	×	OK OK	×
OK OK	×	OK OK	×
OK OK	×	OK OK	×
OK OK	×	OK OK	×
OK OK	×	OK OK	×
OK OK	×	OK OK	×
1 Bad Bail			
OK OK	×	1 Dricard Blank Poor Var	
91 2/3 %		100. %	

Drop test		Caliper Point
1. —	8	.213
2. —	2	.215.5
3. —	10	.213.5
4. —	19	.220.5
5. —	9	.197.5
6. —	2	.199
	50 times	

1829-E

Same as 1828 except use 14 lbs Rosin instead of 13 lbs.

1828-E-A

OK OK	OK OK
OK OK	OK OK
OK OK	OK OK
OK OK	OK OK
OK OK	OK OK
OK OK	OK OK
OK OK	OK OK
OK OK	OK OK
OK OK	OK OK
OK OK	OK OK
OK OK	OK OK
OK OK	Low-Spot
OK OK	OK OK
OK OK	OK OK
OK OK	Low-Spot
100.%	83 1/3 %

Printed on Nickel Moulds

Unit # 1

1828-E 9-4-17

Caliper Points		
.237.5	OK OK	OK OK
.216.5	OK OK	OK OK
.206.5	OK OK	Broken Edge
.224	OK OK	OK OK
.211	OK OK	Chipped Edge
.205.5	OK OK	OK OK
	OK OK	OK OK
	OK OK	OK OK
	OK OK	
	OK OK	
	OK OK	

7/19

Cornell Iron & Steel

C671

9/4/17

1830-E

Chipped Edges			Cracked
		Cracked	
	Cracked		
	Chipped Edges		
			Chipped Edges
	Chipped Edges		
Cracked			
91%	66%	91%	77.7
83%	66%	91%	

3 bells broken after commercial run

1830-E

Same as 1828-E except use 12 lbs Rosin instead of 13 lbs.

Drop test	Calipers Points
1. — 9	.216.1
2. — 5	.214
3. — 8	.214.1
4. — 4	.215.1
5 — 3	.217.1
6. — 2	.215.1
25 times	

9/4/15

1831-D

OK OK	OK OK	OK OK	1 ok 1 blk
1 ok 1 blk	OK OK	1 over foot	OK OK
OK OK	OK OK	OK OK over foot	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
OK OK	OK OK chip fresh	OK OK	OK OK
OK OK	OK OK	OK OK	OK OK
1 chip	1 chip fresh edge	OK OK	OK OK
OK OK			
83%	91%	91%	5 blks and white spots in pieces
83%	83%	83%	

1831-E

Same as 1828-E except use 12½ lbs Rosin instead of 13 lbs.

Drop test	Coefficient
1. — 1	.229
2. — 4	.230.1
3. — 1	.220
4. — 2	.227.1
5. — 5	.231
6. — 2	.234.1
15 times	

1832-E

A. 12 blanks varnished regular let stand 20 minutes and put on another coat then let stand until dry enough for a third coat to be applied and varnish a third time print regular on nickel moulds –

B. Same as A only put on just two coats of varnish.

C. Same as A only put on just one coat of varnish.

Use the same lot of blanks, same varnish, same moulds, and same operators for all three lots. Hold for W.W.D.

all seemed to soak into blank in baking and in the press. sounded a little softer with more coats. looked more shiny when it came out of the oven but it all soaks in in the press.

1833-E

Same as 1828-E except that the wood flour is weighed out in equal thirds - (this gives a larger proportion of Union wood than 1828 as the Union wood bales are smaller) On the mills one mill of each pair has a 24 mesh screen and the other mill a 30 mesh both were 30 mesh on 1828 and caused continual trouble.

- Some are marked 1828-E-S.

1834-B 9/15/5

OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X
OK OK	X	OK OK	X

100%

100%

1834

Varnish 24 regular blanks with #1511 varnish which is the same as the regular varnish before the "shine" after they dry put on a coat of regular shine varnish - #1471 - About 20 minutes between coats -

1835-		E	
OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	x
OK OK	x	OK OK	
OK OK	x	OK OK	x
OK OK	x		
OK OK	x	100% on molding	
OK OK	x		
100%		2 Handles cracked after removing from Oven.	

1835-E
Same as 1834 except put the "Shino" varnish on first.

1835 sounds a little louder than the other three

9/5/17

1836-C

OK OK	x	OK OK x
OK OK	x	OK OK x
OK OK	x	OK OK x
OK OK	x	OK OK
OK OK	x	OK OK x
OK OK	x	OK OK x
OK OK	x	OK OK x
OK OK	x	OK OK x
OK OK	x	OK OK x
OK OK	x	1 bad moisture
OK OK	x	OK OK
OK OK	x	OK OK x
OK OK	x	

100 %

100 %

91 %

1 blanks
Chalfyte No. Bldg.

1836-E

24 regular blanks
varnished with #1511 varnish same as ~~[illegible]~~ regular before Aluno, for comparative ~~test~~ with 1837 regular and also 1834 and 1835-E

Sounds a little softer surface than the other three

See 1841-E

C013

1837-E

Regular to compare with 1834-1836

1838-E

Same as 1833-E except ½ Dupont and ½ Union wood flour.

1839-E

Same as 1838-E except that all mills have 30 mesh screen. changes in wood flume permits this now. 1½ cars of Union wood that gave the trouble "sidetracked" to be worked off later a little at a time.

Oct. 11. 17.

Drop	test
1 —	8
2 —	6
3 —	20
4 —	3
5 —	17
6 —	11
	65

1840-C.

Same as 1839 except use
14 lbs Rosin like 1829 —
Make ~~two~~ drives — (2743 barrels)
Worked well in mills —
Gave 100% of Rosin marketing —

Actual process of Making Varnish 1841-E

Measure 5¼ gallons Alcohol with measuring stick in milk can (one special can used)

Weigh out 150 grammes phenol for each percent of free phenol in the Resin less than 22%

Example - if free phenol is 15% weigh out 7 × 150 g. = 1050 grammes phenol

Weigh out 7.8% of 15000 g. = 1170 grammes of 6/4 – put in open mixer with alcohol and phenol.

Para solution is 1 part para to 20 parts alcohol = $\frac{1}{21}$ 1% para = 150×21 = 3150 grams

Sandarac solution is 1 part Sandarac to 5 parts alcohol – 150 × 6 = 900 grammes = 1% Sand

Sandarac solution is weighed out in same pail as para, add 900 g to the lot after para is weighed. All put into open mixer.

15,000 grammes Phenol Resin sifted into open mixer slowly, after perfectly dissolved, filter thru two thicknesses B grade linen overfumed

Put three 10 gallon lots as above into enclosed mixer with 2106 grammes Shino – run one hour. Shino is put in dry after burned.

Put thru filter press and divided into three equal lots in milk cans. Filter press has (1) thickness grade A linen.

1169 grammes gas black added to each lot – stirred in in a milk can then put thru small paint mill once and then thru large paint mill once.

Take viscosity of each 10 gallon lot. If viscosity is 8 min put in several pints of alcohol and take viscosity again. One pint may reduce viscosity 20 seconds but this varies with the phenol resin. After one can is corrected the other cans can be corrected with fewer approximations.

Example (9 – "10 gallon lots" required 12 gallons alcohol to be added and produced 98½ gallons)

4 pints to Trem
10 of 6/4 to Resin

1841-E.

Same as 1471-E and 1019-E except – use 2½% lampblack and 1½% Shino –
Thru three times – then needed way Viscosity 1.59 S.

1019-E

1511 Varnish

100 grams Resin 16% free Phenol
6 " Phenol to make 22%
1 " Para
1 " Sandarac
7.8 " 6/4
156 " Alcohol
5% Shino put in dry
lampblack. Bring to thru paint mill.
Viscosity 1.29

1471-E

100 grams Resin 15.1% free Phenol
6.9 grams Phenol
1 " Para
1 " Sandarac
7.8 " 6/4
200 " Alcohol
2.85% Lampblack on total weight of above
run thru filter press
Shino – three times through mixer, then three times paint mill

Start 150 Alc. dilute to about 175 Alcohol to make 5 m Visc Varnish

one gallon is about 15 times the above – actually mixed in ten gallon lots – 150 times above. see opp. page. for 5 min viscosity.
about 120 times above " 3 " "

1542-C

Regular varnish 1471-E

Except use 7.7 of 6/4 instead of 7.9

Phenol in resin 16.1

added 5.9

viscosity 2 min. heat test O.K.

Made 2 quarts -

1843-E Two bags wood flour from Kramer

Marked No 3 and No 3 Special test -

8.5 moisture	11.5 moisture
2-6 Resin	2.8 Resin
99½% 30 mesh	100% 30 mesh
84% 50 "	98% 50 mesh
44% 100	79% 100 "
32% 180	57% 180 "

Use 25 lbs above mixed —
25 lbs Union
10 lbs Coarse Union —

C955

1844-E. Nov 15, 1917

Mould 12 - 4 Ok.

Mould 12 - 5 Ok.

9 Ok totals

9 printed and all Pro Spots

put up on the shelf in Bldg # 4 (11-15-17)

1844-E Solvent Naptha instead of Alcohol

1845-E

(Regular schedule for baking Varnished blanks is 2 hours at 130°F.

Take out 100 blanks after baking only 1½ hours - Inspect for low spots test for wear.

#2

1839-E. Unit #10 - 1845-E 11-7-17

98 Records inspected & Rejected

4 Lacquer

14 Porous Spots

10 Metallic Spots

30 Total defects

This is not metallic bloom but due to the alcohol remaining in the varnish or under the varnish W.W.O.

1846-E 100 blanks same as 1845-E except Dated only one hour - Print regular, Dropout for low or rough spots & wear

#1
1839-C Unit # Loc 1471-C - 11-7-

99 Records in Layout 6 Blanks Out.
1 Lengths
2 Trims
1 Eyelets
5 Lengths.
17 Normal Spots
12 Dated in Error.
38 Total Trims

This is not an item that should be counted remaining in the Tannish & under the Tannish. W.W.D.

C(UL)

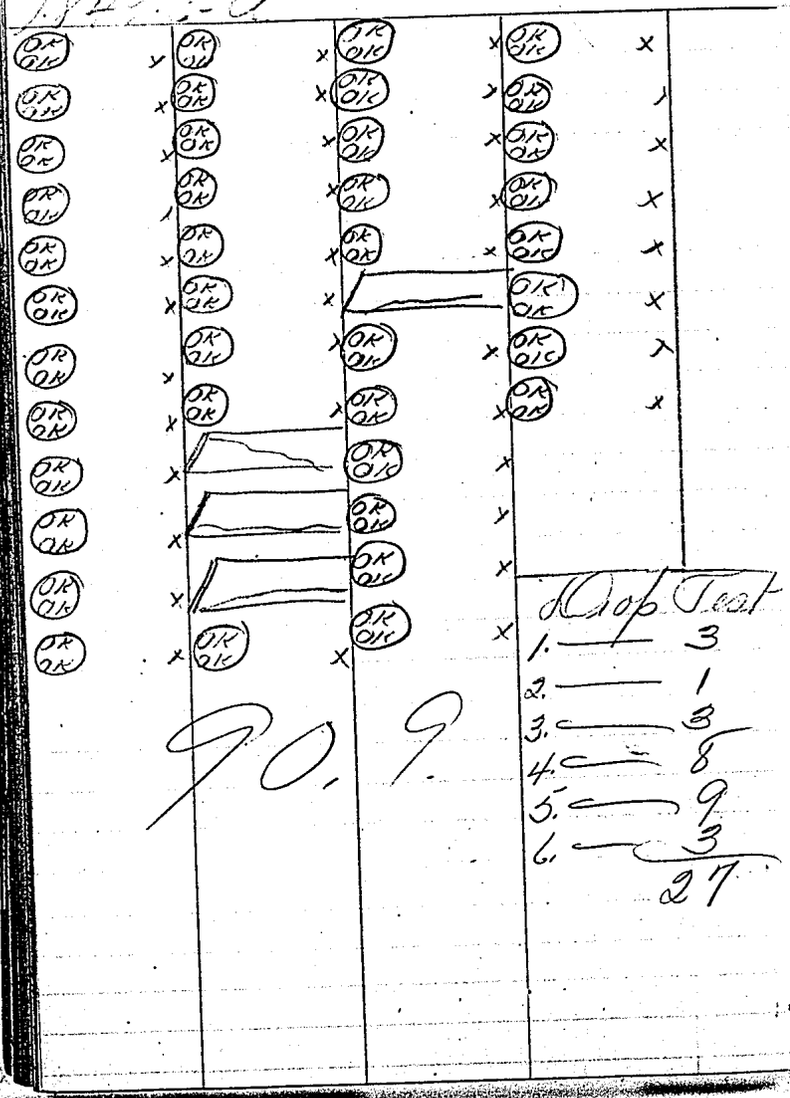
1847-E.

1848-E.

100 gms Resin 15.5% F.P.
6.5 " Phenol.
1 " Pyro.
1 " Sandarac
7.8 " 64
195 " Dr. Alcohol
3½% L.B. + ½% Shellac on total weight of varnish

(105)

1849-C



1849-C

New Loading Mach. Phone Lab.

	Minutes	Seconds	
#1. –	214 –	244 –	30
2. –	225 –	254 –	19
3. –	251 –	258 –	7
4. –	228 –	262 –	34
5. –	223 –	261 –	38
6. –	240 –	265 –	25
7. –	211 –	239 –	28
8. –	234 –	249 –	15
9. –	243 –	253 –	10

tested 12 records for Surface General Surface fair

1850-E

Same as 1824-E except very fine granular wood

75 lbs wood { Kramer regrind 50 lbs
Union 25 lbs.

25 lbs chalk
12 lbs rosin
50 lbs alcohol
2 lbs gas black

Make only one drier pull and keep carefully separate from other powder,

Make up 100 blanks first for tests, varnish and print regular, use test moulds on two prints for comparison of surface,

moulds dirty -

116 made 9 pull outs 3 cracks 3 chipped edges,

grinder sample 83% 180.
73% 350.

Unit 99% 180 88% 350 -

ground and screened good,

1851-E

Powder screened thru 180 mesh hand screen. A

2689-H-3-38 } NS3-A nickel mould
2650-A-1-42 }

2689-H-3-38 } NS2-A
2650-A-1-42 }

2689-H-3-25 } CS1-A copper mould
4112-A-3-60xx }

Same powder not screened special – B

2689-H-3-38 } NS3-B
2650-A-1-42 }

2650-H-3-38 } NS2-B
2650-A-1-42 }

2689-H-3-25 } CS1-B
4112-A-3-60xx }

Special screened powder all cracked but showed more quiet surface, tho not perfect. Too large a percent of wood-like out and sounds like all chalk blank – too solid – no elasticity.

Dec. 13. 1911

1852

OK OK x	OK OK x	OK OK x
OK OK x	OK OK x	OK OK x
OK OK x	OK OK x	OK OK x
OK OK x	OK OK x	OK OK x
OK OK x	OK OK x	OK OK x
OK OK x	OK OK x	OK OK x
OK OK x	OK OK x	OK OK x
OK OK x	OK OK x	OK OK x
OK OK x	OK OK x	OK OK x
OK OK x	OK OK x	OK OK x
OK OK x	OK OK x	OK OK x
OK OK x	OK OK x	OK OK x
OK OK x	OK OK x	OK OK x
OK OK x	OK OK x	OK OK x

Drop test

1. — 2
2. — 4
3. — 2
4. — 2
5. — 2
6. — 2

total 14 times

100%

25 lbs Union
25 lbs Solomon 850
10 lbs Solomon coarse

1852-C.

Same as 1853 [illegible] except 11 [illegible] instead of 12 [illegible].

354 Printed

2 Veneer pull outs.
2 P.V. on label.
3 cracked centers.
1 thin.
5 wedge.
3 scratches.
17 snaps
15 rough spots.

48

Machine test

1 rough spot
1 wedge
9 snaps

Total O.K. 83.3%

1853-E

Small cylinder screen 10" x 32" with spiral conveyor inside 180 mesh wire. 8 revs 6 times per revolution at one end, 24 convolutions of spiral.

100 lbs powder spun thru —

	1st time	35½ lbs	fine
tailings	2d time	20 "	fine
"	3d time	10 "	fine
		65½ total fine	34½ lbs tailings.

Make fines into blanks, varnish and print on special selected moulds.

fine powder tested 100% 150 mesh
86% 350 mesh

tailings tested {88% 180
52% 350}

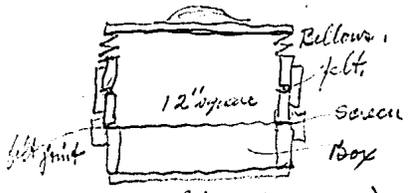
Show that 12% of the 34½ lbs or about 4 lbs of the original 100 lbs would not pass 150 mesh but the original 100 lbs was supposed to have been tested 99% 180 mesh —

All blanks but one cracked.

Screen is not efficient as tailings contain 88% 180 mesh and nearly all the wood.

1854-E

Experiment to force particles thru the screen by pulsations of air thru the screen both ways.



bellows worked up and down

This proved very slow and only took out 1/4 of the fine after a very long time, (35 min)

40 gms
after 35 minutes
25 gms thru
15 gms tailings

Two blanks made from this powder give very good surface but are not ideal - This does not solve the problem.

G001

1855.E.

Same apparatus as 1854.E but with the lower box removed.

After 4 minutes only 10.7 % of the tailings will pass thru 180 mesh screen.

This looks very promising - A larger receiving box to allow compression of the air will make this a very efficient machine.

Had iron can ~~fitted~~ up to take place of box.

From Rice's Books 7-R.8 8R 59R

Printing press.

1856-E Thick sides of wedge all on same side,

12 Blankets selected for worst wedges

Blankets High	Blankets low	Blankets Dif.	Prints all thick sides put together High	Prints low	Prints Dif	improvement
286	222	62	228	222	6	+ 56
287	195	92	210	199	11	81
274	230	44	233	210	23	21
276	215	61	222	208	15	46
295	220	75	223	221	2	73
263	193	70	214	196	18	52
279	203	76	212	200	12	64
258	210	48	213	185	28	20
300	207	93	221	198	23	70
266	209	57	224	194	30	27
265	203	62	199	194	5	57
280	228	52	222	211	11	41
Average 277	211	66	218	203	15	51

all ER

This shows a great improvement in printing press of wedge blankets when the wedges are placed in the press with thick edges all to the same side — the average improvement is .051.

Same experiment was tried with blankets thick and thin edges alternating. All but one were improved — average improvement was only .015

C120

E.B. from Bill's Book -

1857-E

Use a discarded record or a discarded varnished blank on each side of records in edging machine to prevent chipt edges on the outside blanks. Use this with the large clamping disc.

Dec 3-1917

1858-E

1841 varnish 3 minute viscosity.
Blanks baked two hours at 130° F.

Blanks that show dull areas are revarnished with the same varnish except one minute viscosity the same as local patching. Then baked again at 130° for 2 hours.
From December 17-17 all local patching discontinued for this process.
From Dec 22 all blanks given two coats varnish as above except some carefully selected to keep ahead of printing.

5861 prints gave 89% OK on eye and machine inspection, and a very slightly better surface than one coat.

Troubles with many varieties of wood flow about this time made the results of all varnish experiments very uncertain.

1859-E

Same as 1858-E except that the thin coat is 1½ min viscosity instead of 1 min.

Varnish stewed out around the edges of prints and caused injury to mounts.

Suggest experiments with more Para and 6/4 to prevent this.

35-R was made up with 1½% Para

34-R was made with 2% Para.

1860-E

Same as 1658 E except that both coats are 3 mil.

Same defect as 1859 only more, suggested longer baking and higher temperature to cure varnish more — Varnish baked 4 hours at 130° showed little if any improvement on flowing

Surface test 48 faces
39 good
8 fair
1 run out at start

40 ~~inspected~~ - no varnish defects -
82½% OK,

Surface test 44 good
8 fair
1 run out
82½% OK,

Surface test 48 faces
45 good
2 fair
1 run out,
65% OK

No varnish defects,

1861-E
one quart 3 min 1841 varnish except 7.9 of 6/4

varnish and bake 2 hrs at 130°F,
varnish and bake again 2 hrs at 130°F,

Surface test

48 faces.

45 good

2 fair

1 run out at start

No varnish defects,

65% O.K. all due to blanket dip

1862-E

One quart 3 min 1841 varnish except

8.0 b/q

apply two coats varnish as 1861-E

1830-E Blanks.

Surface test 44 good
3 fair
1 burn out

40 records printed 82.4% O.K. no discards from varnish defects.

1863-E

One quart 3 min 1841 varnish except 7.9 of 6/4 and 1.5" 1 min.
Applied 2 coats varnish as 1861-E

Sm space text

47 good,
1 fair.

40 printed 87 5/8 O.K. no varnish defects.

1864-E

One quart 3 min 1841 varnish except 8.0 6/4 and 1.5" para appearance as 1861-E

1865-E

Same as 1824 E

use 20 lbs minion
20 lbs Dupont
20 lbs Granular wood
12 lbs Rosin
2 lbs Lampblack
50 lbs Alcohol

Run regular until granular wood stock is used then change to 1866-E

Varnished with 2 coats 1841-E - 5 min bice,

152 prints. 8 pull outs on label.
2 parallel cracks.
1 thick.
5 snaps.
3 rough spots.

Printed on single moulds.

87 5/10 % O.K.

164 prints

1 pull out on label
1 radial crack
5 wedge
8 thick
5 pull outs on mucic
1 snap
1 silver spot
1 rough spot,

82.9% O.K.

Drop test -

1. -	20
2 -	16
3 -	3
4 -	9
5 -	12
6 -	12
	72

1866-E

1827 for pressure

Same as 1824 E except as follows —
use 30 lbs Union
30 lbs Dupont or Hornbeck
12 lbs Rosin
2 lbs Lampblack
50 cls Alcohol

Union 9.9 % moisture
Dupont 4.5 % moisture,

C141J

1867-E suggested by Mr Gray.

Regular blank 1830
Pressed between two polished moulds
on regular printing schedule —
Varnished one coat 3 min bake (1841-E)
air dried 3/4 hour —
2d coat same varnish (3 min bake 1841-E)
baked 2 hrs 130°
Printed regular —
very smooth surface —
but not nearly as smooth as 1869.

1868-E Suggestively Mottled
Same as 1867-E except baked
~~Etc~~ after each coat of varnish.

Sounds about same as 1867 but not
as smooth as 1867.

C1453

78 faces tested for surface

77 good

1 run out at start.

Lucar test 250 times O.K.

edging 100 %,

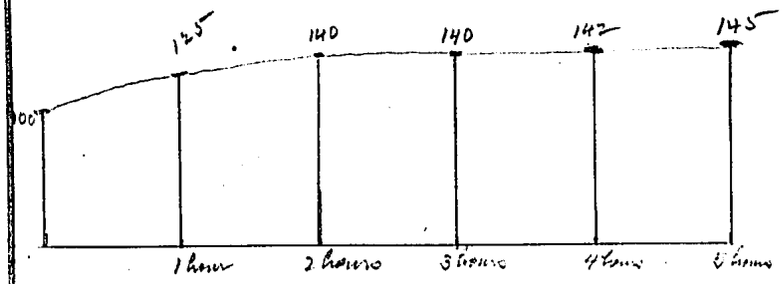
Much better surface than 1867-1868

1869-E-

Blanks 1830-E

Varnished with 1841-E-3 min viscosity - varnish two coats - air dried about 30 min between coats

Baked on an old schedule used for transfer plates (marked No 1 on metal template). Temperature run to 145°. Total time 5 hours.



Mr. Kircher suggested this schedule to dry out the alcohol at the lower temperature so as to stop the bubbles which troubled me with very thick varnish. The long bake cures the varnish to the rubbered state and prevents flowing over edges and marring up moulds.

no 3 bake

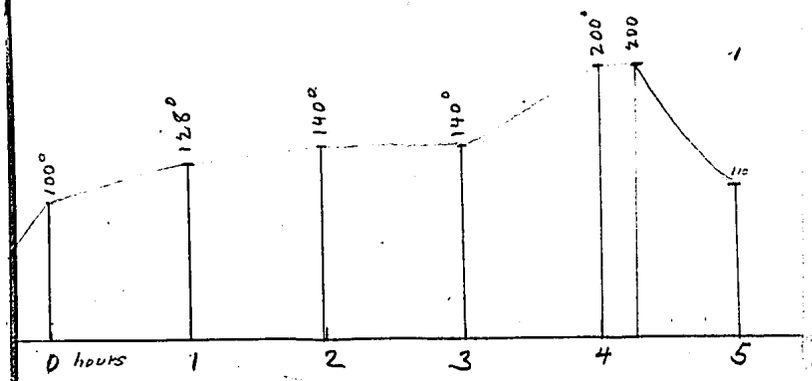
1870-E

Kinlochs No 22 - No 3 bake -

Blanks 1830 E

2 coats 1841-E varnish air dry 1/2 hour between coats.

Bake on diagram shown below.



Surface test on 56 faces.

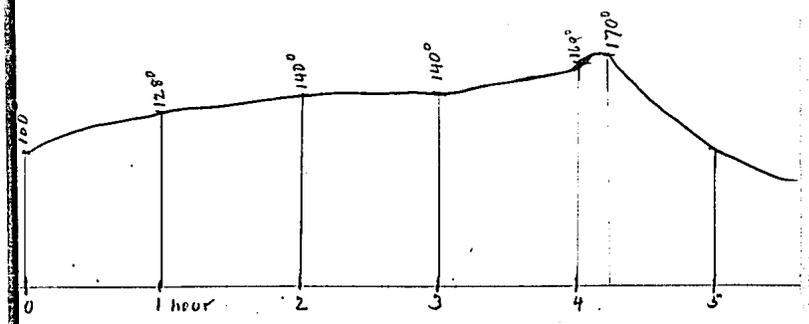
46 good

8 1.2.0. at start

2 fair.

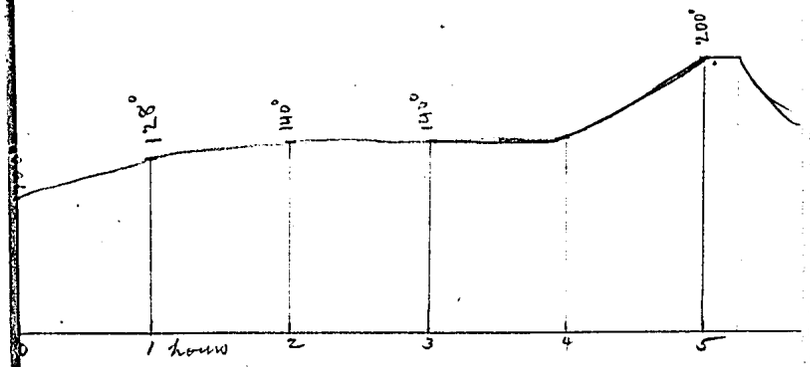
Blanks full of blisters but print out OK.

1871-E Kinchens No 23
Blanks 1830-E

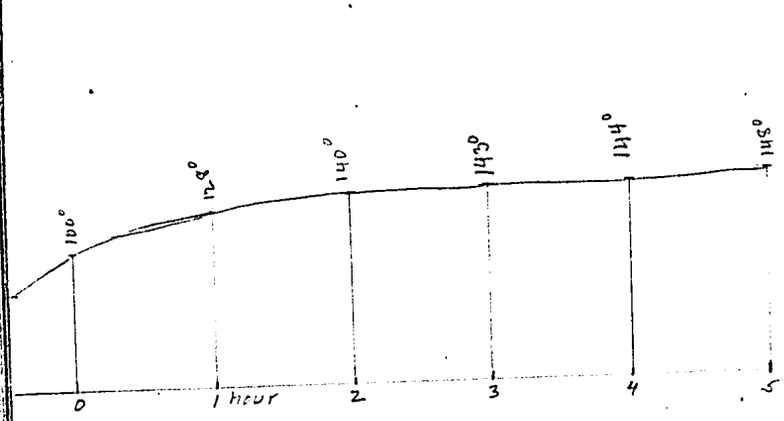


Flow in printing.

1872-E Kinder's No 24 No 4 Bake —

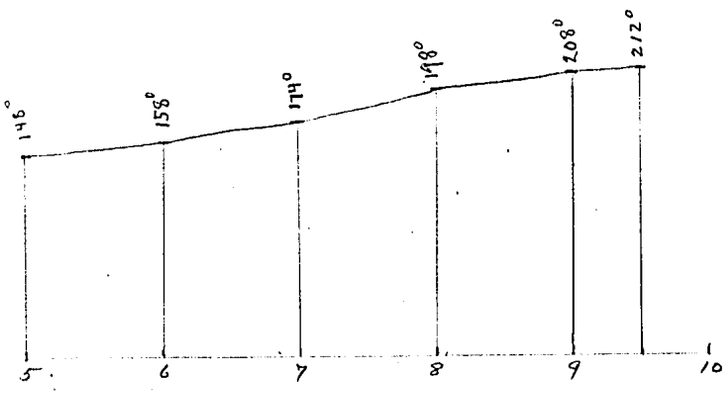


Blanks full of blisters



1873-E

Baking schedule.



1856-E Blanks varnished two coats 1841-E Rev, 3min Disc,

1395 Printed	Veneer pull out	15
1037 O.K.	Crushed edge	17
358 Discards	Pallouton Bald	21
	Parallel ck	56
	Radial cracks	132
	Wedge	19
	~~Thin~~	7
	Thick	5
	Swayes	51
	Rough spots	36
		358

Surface very good

[155]

1874-E

First 9 hours of 1873-E baking schedule.

1875-E

First 8 hours of 1875 E batting schedule,

1876-E Make one quart varnish —

100 gms Resin (Resin contains 15.1%)
6.9 " Phenol to bring free phenol up to 22 gm
1 " Para.
1 " Sandarac.
7.8 " b/4
135 " alcohol

Clear varnish

viscosity 508

Varnish 1 coat 3 min 184/reg
air dry
varnish 1 coat of 1876-E
Bake on special schedule 1873-E
119 painted No flow and few blisters.
60 O.K.
59 discard

Cracked edges	2
Pelkanton label	41 — !!!
Radial cracks	3
Parallel cracks	1
Thin	1
Thick	2
Grapes	8
R spots	1
	59

Note no poor finish baked 9 hours

Blanks made by unit 6,
Blanks badly wedged
Made by Unit 6.
of 24 blanks –
Blanks, average low 223, high 257 dif 34
Pucks, " " 191 " 240 " 49

1878-E

Make one drum 18 mixes powder
32½ pounds Dispentwood.
32½ " Union wood.
12 " Rosin.
35 " Chalk.
50 " Alcohol
2 " Kamp-black –
Mould regular –
Varnish special –
Print regular –

This experiment is not satisfactory since tailings could not be reground and mixed in with powder

797 printed chipt edge 24
569 OK, bath specks 25
228 discard * Thin 135
71% OK * wedge 46

Both thin and wedge were caused by powder being lighter and strike off left higher above ring.

Drop test 24 average below average –

Blanks 1879-E
Made on Unit 4

	Low	High	Dif.		Records Low	High	Av.	
1	247	260	13		224	232	8	
2	238	253	15		205	229	24	
3	226	249	23		216	224	8	
4	225	254	29		203	231	28	
5	229	263	34		228	235	7	
6	241	260	19		207	212	5	
7	216	242	26		214	229	15	
8	237	252	15		214	233	17	
9	239	261	22		234	236	2	
10	239	257	18		216	231	15	
11	248	269	21		220	227	7	
12	220	246	26		200	215	15	
13	245	264	19		220	239	19	
14	241	243	3	average	207	222	15	average
15	238	263	25	low 238	226	237	11	low 213
16	231	247	16	high 257	205	219	14	high 225
17	246	268	22	dif. 19	215	220	5	dif 12
18	241	257	16		210	225	15	
19	256	273	17		217	229	12	
20	239	255	16		221	225	4	
21	232	246	14		220	225	5	
22	264	268	4		203	220	17	
23	244	262	18		203	217	14	
24	258	278	20		211	226	15	
25	242	255	13		212	222	10	
26	228	254	26		199	223	24	
27	237	265	28		209	221	12	

1879-E

Experiment for wedge blanks and records.

Increase pressure of contact.

Make 2 rounds Blanks 225 lbs.

Bottleneck —

Varnish 2 coats 1841-E Ban. Bake 1870. E

51,5% O.K.

Eye inspection 7 Parallel cracks
3 radial cracks
3 varnish pull outs,
13

Compare opposite page with 1880-E may all be in different unit making the blanks. See also 1878

Tradeson unit 6 1880-E

	Blanks Low.	High.	Dif.	Records Low	High	Dif.
1	230	252	22	199	235	36
2	247	264	27	208	225	17
3	232	264	32	205	229	24
4	232	260	28	214	241	27
5	232	255	23	205	224	19
6	248	283	35	207	225	18
7	232	245	13	219	238	19
8	218	257	39	205	237	32
9	209	265	56	198	219	21
10	240	250	10	211	239	28
11	236	281	45	223	230	7
12	230	247	17	213	225	12
13	231	264	33	215	234	19
14	239	250	11	229	239	10
15	220	253	33	207	231	24
16	210	219	9	discard		
17	235	266	28	213	238	25
18	236	289	53	207	231	24
19	234	243	9	206	220	14
20	244	261	17	217	231	14
21	246	253	7	218	228	10
22	223	247	24	193	231	38
23	224	270	46	195	234	39
24	216	243	27	196	202	6
25	236	264	28	211	240	29
Avg	234	259	25	208	231	23

1880-E

Experiment for knedge blanks and records.

Make two rounds starting with full pressure —

Calliper,

1865-E Blanks Dar 2 cents 1841-E 3 sec min viscosity.

Bake 1869-E schedule —

Paint 225 lbs contact pressure,

25% O.K.

Discards parallel cks. 7

Radial cracks 4

Varnish C.O. on edge 7 at edge — due to varnish flowing.

18

Seems to make more wedges

More Surface

Seemed very much rougher than regular.

These blanks flowed considerably more than the regular blanks.

On account of coarser grinding they probably require a larger percentage of chalk as was the case when the used coarser powder

1881-E

Make 125 blanks with powder direct from grinders. Be careful not to get it contaminated with any reground tailings. Also keep regular powder from mixing with it in the press etc, also do not get strike off from this mixed with regular powder.

Blanks will come thin unless strike off blades are raised.

Make in press in which wider parallel strips have been used.

Varnish 2 coats 5 min varnish –
Batch 1875-E schedule –

113 printed
3 [illegible]
16 parallel ck
13 radial ck
Condemned { 11 Wedge
Strike [illegible] { 23 thick
1 Rough spot.
67 = scrap.
46 ok 40.7%

Test for surface 18 good
5 fair
1 Run out.
24 tested.

1882-E 1865-E blanks

Bake 100 blanks for 30 minutes to dry them out thoroly (oven 130°)

Varnish 1st coat while blanks are warm airdry for one hour put in cold oven ~~with [illegible] coat~~ and bring up to 130° in one hour. Then apply second coat and start in cold oven bake on schedule 1875 E to 8 hour point.

1841-E varnish, 3 min biscuit.

Blanks show a little more glossy than 1875-E same varnish.

94 printed 35 O.K.
14 veneer pull outs.
2 P.O. on label.
9 parallel cracks.
16 Radial cracks.
16 cracked blanks.
1 low spot.
1 swaps.

First regular 3/6/18

169 blanks –

2 coats 5min wise 1841 bar baked 9½ hours.

141 records received.
129 O.K.
2 Paul ant oil dated
2 mould injury
2 dents
2 low spots
3 snaps;

91% O.K.

no cracks

Surface

48 sides tested
19 fair surface
12 good surface
13 bad surface
4 run out

Rough – Powder must be screened –

48 sides tested
19 fair
12 good
13 bad
4 run out

1883-E Like 1827 except as follows.

27½ lbs Union Wood.
27½ lbs Dupont Wood.
} 55 lbs wood.
45 lbs chalk.
11 lbs I Rosin.
50 lbs Alcohol
2 lbs gas black.

Make up 100 blanks with this powder as it leaves the grinders.

~~Make up 100 blanks~~

Varnish 2 coats 1841 5 min bis. 3/7/18

Prints regular –

349 printed.
5 veneer pull outs.
3 pull out on label
1 radial crack.
4 mould injury
14 white spots.
25 cracked blanks.
13 low spots.
7 snaps.
79% O.K.

48 sides tested –
35 fair.
6 land.
4 good.
3 run outs.

tailings from 1865-E made this rough.

1884-E

1883 Powder from grinders is mixt in screening with 1/3 tailings from 1865-E powder.

Mould regular

Varnish 2 coats 5 min bake 1841-E
Bake 9½ hours.

149 records received
1 veneer pull out
1 crushed edge
12 P.O. on label
1 radial crack
8 cracked blanks
2 cracked center
5 low spots
1 wrap
1 silver spot,

3/6/18

117
78% OK

48 sides tested
29 fair
7 run out
11 hard
1 good

Rough —
Powder must be screened

1885-E

55 pounds paper pulp, cut up to sawdust and then run thru Schutz Oriel Mill,
45 lbs chalk —
11 lbs rosin
50 lbs alcohol
2 lbs lamp black —

Make up 100 blanks as it leaves the grinder — hold remainder —

1886-E

Bake 100 blanks like 1882-E except use varnish 5 min viscosity instead of 3 mins as in 1882

1841-E Varnish

12 printed 1873-E Blanks. 10 O.K.
Surface bad — 2 discard for poor prints.

3/6/18

686 printed
6 beneath pull outs
17 P.O. on label
2 parallel cracks
18 radial cracks
8 wedge
10 thick
34 snaps
2 poor print
6 rough spots

583 OK
84.9 %

3 min after 200 mark before high pressure

Good.

1887-E

Printing schedule.
Contact — to line on thermometer 200°
hold on contact for 2 minutes.
Full pressure for 10 min.

try this on 9½ hour baked blanks 1873-E

also on 6 hour bake 1873-E curve.
Granite 5 Varnish —

Kircher tried 2 min as too good
and then 3 min 100% OK.
4 " 20% poor prints
5 " all poor prints
} no Cracks

All printing changed to this schedule March 5-1918 — 3 min low pressure after thermometer reaches 200° then 9 minutes on high pressure.

At the same time I started Kircher on this schedule to soften ~~Blank~~ Blanks I had Clancy make up a pair of embossed ring moulds E-1424 they were used to make 27 prints at night March 6 All were free from cracks March 7 all moulds made were embossed. W.W.D.
Schedule could never be used with soft varnish.

(181)

1888-E
Special Baking Schedule - Kirchner

1889-E
Special Bathing schedule - Kinder

1890-E Special Bathing schedule - Kindu

1891-E Expt - Christiansen

½ pint 5 min viscosity 1841-E Varnish -

with ½ of one percent Aniline oil.

Cut this out - stopped it and told christiansen that we do not want to start anything new like this that would take a longtime to prove out,

W.W.D.

1892-E Varnish Exp.

100 grammes Resin

phenol to bring free phenol up to 22%

1 g. para -

1 g. sandarac.

7.8 ~~[illegible]~~ g. 6/4

~~[illegible]~~ alcohol dilute to 5 min bine.

~~2.75 % shino on wet weight of above.~~

~~5 % [illegible] " " "~~

8 g ~~shino~~

13.75 ~~[illegible]~~ g Gas black -

1893-E Varnish Exp.

100 g. resin

Phenol to bring free phenol to 22%

1 g. para

1 g. sandarac

7.8 g. 6/4

alcohol to dilute to 5 min vise.

3½ g. Gas black

2 g. Shino.

1894-E { 1114 Blanks rec'd.
660 O.K.

chipt edge 90
~~water spots~~ 45
Thin 92
wedge 258
pull outs 3

602 Records
454 O.K.
1 bevel pull out
3 smoked edges
31 pull outs on label
11 parallel cracks
8 radial cracks
20 wedge
13 thick
14 snaps
1 silver spot
16 rough spot
118 discard —

80% OK,

1894-E Like 1827 except as follows:
27½ lbs Union wood. } 55
27½ lbs Dupont wood. }
45 lbs chalk
11 lbs I Rosin
50 lbs Alcohol
2 lbs gas black.

(Parking press 649 lb)

Make one drum of Rosin solution —

Make 100 blanks just as it leaves grinders and mark 1894-E-A. Sounds rough-varnish ~~do not clean it up.~~

In screening the remainder mix with tailings from 1866-E 2-3 as usual.

1895-E

Printing schedule.

Contact to line on thermometer 200°F.

hold on contact for 3 min.

Full pressure for 5 min.

This is a development from 1887-E and saves 4 min on each schedule - suggested by Kirk

Started 10 A.M., March 9-18 - after wear test showed it to be O.K. Platens are heated 9½ hours - 1873-E schedule - run all day 39

Pressure increased to 700 lbs from 600 on printing presses, to take care of ring moulds and prevent low prints, 1896-E

Gives O.K. wear test, but we are afraid to use it as varnish may not be absolutely cured and may peel - stopped 6 P.M.

1896-E-

Pressure on printing hydraulic press changed to 700 lbs March 9-10 AM.

Blanket is soft and makes nearly a full print with only 40 lbs pressure for the the 3 minutes contact period after the 200° line is reached.

stops low points - smoothed by vibration.